**Objectives:**To create an MVC project and WebApi Project using .net Framework.

**Theory:** ASP.NET Web API is a framework that makes it easy to build HTTP services that reach a broad range of clients, including browsers and mobile devices. ASP.NET Web API is an ideal platform for building RESTful applications on the . NET Framework.The Web API is an open source and it can be hosted in the application or on the IIS .The request may be GET, POST, DELETE or PUT.

There are many differences between MVC and Web API, including:

* We can use the MVC for developing the Web application that replies as both data and views but the Web API is used for generating the HTTP services that replies only as data.
* In the Web API the request performs tracing with the actions depending on the HTTP services but the MVC request performs tracing with the action name.
* The Web API returns the data in various formats, such as JSON, XML and other format based on the accept header of the request. But the MVC returns the data in the JSON format by using JSONResult.
* The Web API supports content negotiation, self hosting. All these are not supported by the MVC.

**Group Discussion:**

Create a folder D:\ApexRestaurant\ and initialize projects:

dotnet new mvc -o ApexRestaurant.Mvc --auth Individual

dotnet new web api -o ApexRestaurant.Api

dotnet new classlib -o ApexRestaurant.Services

dotnet new classlib -o ApexRestaurant.Repository

**Create a solution**:

dotnet new sln -n ApexRestaurant

Add the above projects to this newly created solution:

dotnet sln ApexRestaurant.sln

add .\ApexRestaurant.Repository\ApexRestaurant.Repository.csproj

dotnet sln ApexRestaurant.sln

add .\ApexRestaurant.Services\ApexRestaurant.Services.csproj

dotnet sln ApexRestaurant.sln

add .\ApexRestaurant.Api\ApexRestaurant.Api.csproj

dotnet sln ApexRestaurant.sln

add .\ApexRestaurant.Mvc\ApexRestaurant.Mvc.csproj

Add reference of projects:

dotnet add .\ApexRestaurant.Services

reference .\ApexRestaurant.Repository\ApexRestaurant.Repository.csproj

dotnet add .\ApexRestaurant.Api

reference .\ApexRestaurant.Services\ApexRestaurant.Services.csproj

dotnet add .\ApexRestaurant.Api

reference .\ApexRestaurant.Repository\ApexRestaurant.Repository.csproj

**Conclusion:** From this lab we are creating one project with properties like MVC, Services,Repository and Api.